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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/593,008

09/18/2006

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EXAMINER

NGO, CHUONG A

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/593,008	Applicant(s) LIBAULT ET AL.	
	Examiner CHUONG A. NGO	Art Unit 4133	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/18/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is in response to the Applicants' communication filed on 9/18/2006. In virtue of this communication, claims 1-26 are currently presented in the instant application.

Drawings

2. The drawings submitted on 9/18/2006. These drawings are reviewed and accepted by the examiner.

Priority

3. Receipt is acknowledged of paper submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

4. The information Disclosure Statement (IDS) Form PTO-1449, filed on 9/18/2006 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosed therein was considered by the examiner.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-4, 6-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP-1334280 (hereinafter Harrison), as admitted page 1, lines 1-16 of the instant application in view of US Patent 6,760,804 (hereinafter Hunt).

Regarding claim 1, the limitation “Local radio communication device comprising at least: one IP point of access adapted to communicate at least outwards from the network in IP mode” is met by Harrison admitted in the statement in (page1, line 5-8, the invention relates to a local radio communication device comprising: - at least one IP point of access adapted to communicate at least outwards from the network in IP mode) of the instant application;

the limitation “a point-to-point communication module adapted to communicate at least with a terminal according to at least one point-to-point communication protocol” is met by Harrison admitted in the statement in (page1, line 9-11, a point-to-point communication module adapted to communicate at least with a terminal according to at least one point-to-point communication protocol) of the instant application;

the limitation “a first interface adapted to allow the IP access point to communicate with the point-to-point communication module wherein the first interface is adapted to be presented to an electronic device communicating in IP mode with the IP access point” is met by Harrison admitted in the statement in (page1, line 12-14, and a first interface adapted to allow the IP access point to communicate with the point-to-point communication module) of the instant application;

Although Harrison does not explicitly teach “in the form of at least one virtual port and the said first interface is adapted to be controlled by the said electronic device by means of control instructions”. However, attention is

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directed to Hunt, which teaches (col. 10, lines 10-15, the interface device 530 creates the virtual serial communication port 520. A virtual port physical device object (PDO) 527 is created that effectively represents a serial communication port to the user or other applications on the electronic device 500, in accordance with one embodiment of the present invention).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Harrison invention by employing the teaching as taught by Hunt to provide virtual communication ports for various devices to provide various functions as desired by the users. Doing so would merely involve using known technique (creates and manages virtual serial communication ports) to improve similar device (wireless communication system) in the same way (serial communication ports having a UART device).

Regarding claim 2, the claim limitation is taught by Hunt in (col. 9, lines 6-14, Multi-function serial port devices and drivers are common in communication networks. However, the creation of a serial port that is independent of the type or amount of underlying hardware is unique. FIG. 5 illustrates architecture and data flow diagram for an exemplary electronic device 500 with wireless capabilities that provides interfacing capabilities between a legacy software application 510 that is not compatible with protocol associated with a wireless communication network). Therefore, the modification of Harrison and Hunt, as discussed above would have included the “serial radio link”. Note: “Multi-function

serial port devices and drivers use to connect over wireless communication network” is the same as “serial radio link”.

Regarding claim 3, the claim limitation is taught by Hunt in (col. 4, lines 45-52, some embodiments of the present invention are discussed primarily in a context in which devices and systems are coupled using wireless links, and specifically with regard to devices and systems compliant with the Bluetooth technology. Bluetooth is the code name for a technology specification for small form factor, low-cost, short-range radio links between personal computers (PCs), mobile phones and other devices). Therefore, the modification of Harrison and Hunt, as discussed above would have included the “Bluetooth protocol”.

Regarding claim 4, the claim limitation is taught by Hunt in (col. 9, lines 26-32, The Bluetooth profiles include but are not limited to profiles such as a serial host communication port, a serial client communication port, a fax client communication port, a DUN client communication port, local area network (LAN) access point (LAP) client communication port, and a Transmission Control Protocol/Internet Protocol interface. Therefore, the modification of Harrison and Hunt, as discussed above would have included the “IP access point is connected to the Internet network”.

Regarding claim 6, the claim limitation is taught by Hunt in (col. 7, lines 19-27, It is appreciated that device 300 of FIG. 3 is exemplary only and that the present invention can operate within a number of different intelligent electronic devices, such as a desktop computer system, a laptop computer system, a

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personal digital assistant (PDA), etc. In the Bluetooth embodiment, electronic device 300 is a Bluetooth enabled device coupled with a Bluetooth transceiver, such as transceiver 200). Therefore, the modification of Harrison and Hunt, as discussed above would have included the “local electronic device in IP mode”.

Regarding claim 7, the claim limitation is taught by Hunt in (col. 4, lines 61-65, it is appreciated that other embodiments of the present invention are well suited to protocols associated with other wireless communication standards, such as the IEEE 802.11 wireless communication standard). Therefore, the modification of Harrison and Hunt, as discussed above would have included the “radio channels according to the standard IEEE 802.1 1”.

Regarding claim 8, the claim limitation is taught by Hunt in (col. 8, lines 54-59, the communication interface 480 is a serial communication port, but could also alternatively be of any of a number of well-known communication standards and protocols, e.g., parallel, SCSI (small computer system interface), Fire wire (IEEE 1394), Ethernet, Universal Serial Bus (USB), Personal Computer Memory Card International Association (PCMCIA), etc.). Therefore, the modification of Harrison and Hunt, as discussed above would have included the “USB link and an Ethernet link”.

Regarding claim 9, the claim limitation is taught by Hunt in (col. 5, lines 20-24, Devices 110-170 can be printers, personal digital assistants (PDAs), desktop computer systems, laptop computer systems, cell phones, fax machines, keyboards, joysticks and virtually any other electronic device. Further, teaches in

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col. 10, lines 40-49, an interface device FDO 535 represents the logical functionality of the interface device 530, which includes maintaining all the communication status that the physical serial communication port that is emulated by the virtual port 520 would perform. Part of the integrated functionality of the interface device 530 includes providing the necessary handshaking required to initialize a serial communication port that includes an actual universal asynchronous receiver/transmitter (UART) device or modem device). Therefore, the modification of Harrison and Hunt, as discussed above would have included the "Fax or modem is using "AT" instructions".

Regarding claim 10, the claim limitation is taught by Hunt in (col. 11, lines 4-13, the virtual serial communication port (COM port) 520 provides legacy software application compatibility with the Bluetooth wireless communication protocol, and to other wireless communication standards or specifications. In one embodiment, a COM port is assigned during installation of the interface device 530 to allow for Dialup Networking (DUN) applications. Also, a COM port is assigned during installation to handle FAX dial out applications. Further, a COM port is assigned during installation to allow for dial less DUN connections for LAN access over PPP. A COM port is assigned during installation to handle host serial applications. Another COM port is assigned during installation to handle client serial applications). Therefore, the modification of Harrison and Hunt, as discussed above would have included the "LAN access over PPP is using IP access point".

Regarding claims 11, 12 have limitations similar to those treated in the above rejection(s), and are met by the references as discussed claim 10 above.

Regarding claims 13, 14 have limitations similar to those treated in the above rejection(s), and are met by the references as discussed claim 9 above.

Regarding claim 15, the claim limitation is taught by Hunt in (col. 11, lines 4-13, A Bluetooth system supports both point-to-point and point-to-multi-point connections. Several piconets can be established and linked together in a "scatternet," where each piconet is identified by a different frequency hopping sequence. All devices participating on the same piconet are synchronized to their respective hopping sequence). Therefore, the modification of Harrison and Hunt, as discussed above would have included the "Bluetooth hop".

Regarding claim 16, the claim limitation is taught by Hunt in (col. 4, lines 45-52, some embodiments of the present invention are discussed primarily in a context in which devices and systems are coupled using wireless links, and specifically with regard to devices and systems compliant with the Bluetooth technology. Bluetooth is the code name for a technology specification for small form factor, low-cost, short-range radio links between personal computers (PCs), mobile phones and other devices). Therefore, the modification of Harrison and Hunt, as discussed above would have included the "other devices can be any devices such printer server".

Regarding claim 17 has limitations similar to those treated in the above rejection(s), and are met by the references as discussed claim 16 above.

Regarding claim 18 has limitations similar to those treated in the above rejection(s), and are met by the references as discussed claim 6 above.

Regarding claims 19, 20 have limitations similar to those treated in the above rejection(s), and are met by the references as discussed claim 10 above.

Regarding claim 21, the claim limitation is taught by Hunt in (col. 4, lines 54-59, it is appreciated that the present invention may be utilized with devices and systems coupled using technologies and/or protocols different from Bluetooth, including but not limited to infrared communications links as defined by the Infrared Data Association (IrDA)). Therefore, the modification of Harrison and Hunt, as discussed above would have included the “IrDA is using OBEX protocol”.

Regarding claim 22, the claim limitation is taught by Hunt in (col. 7, lines 41-46, the electronic device 300 also includes a data storage device 390 (e.g., a compact memory device such as a smart stick, flash memory, or a memory stick) coupled with the bus 208 for storing information and instructions. Data storage device 390 can be removable. See Fig. 3). Therefore, the modification of Harrison and Hunt, as discussed above would have included the “memory stick or removable data storage device”.

Regarding claim 23, the claim limitation is taught by Hunt in (col. 11, lines 31-37, in step 720 of process 700, the present embodiment emulates a serial communication port that contains a UART. This allows the operating system of the electronic device containing the legacy application to recognize and initiate

the virtual serial port. Additionally, this emulation allows for the transfer of data to and from the virtual serial port). Therefore, the modification of Harrison and Hunt, as discussed above would have included the “transfer of data to and from the virtual serial port”.

Regarding claim 24 has limitations similar to those treated in the above rejection(s), and are met by the references as discussed claim 4 above.

Regarding claim 25 has limitations similar to those treated in the above rejection(s), and are met by the references as discussed claim 10 above.

Regarding claim 26 has limitations similar to those treated in the above rejection(s), and are met by the references as discussed claim 9 above.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over EP-1334280 (hereinafter Harrison), as admitted page 1, lines 1-16 of the instant application in view of US Patent 6,760,804 (hereinafter Hunt) as applied to claim 1 above, and further in view of US Patent Application Publication 2004/026444A1 (hereinafter Kaplan).

Regarding claim 5, Harrison and Hunt do not explicitly teach “The IP access point comprises an ADSL interface suitable for access to the internet network”. However, attention is directed to Kaplan, which teaches (paragraph [0040] FIG. 3 shown is hub 304 and it includes ADSL/ATM interface 310 and ATM backplane 314. Together, these components allow for ATM communications within the hub and with external elements through ADSL/ATM interface 310. ADSL/ATM interface 310 converts end user control and

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communications into the ADSL/ATM format for transport to the service node. ATM/ADSL interface 310 also receives communications and control from the service node and provides these to the appropriate components of hub 304. ADSL/ATM 310 interface also provides smoothing and shaping for the ATM signals).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Harrison and Hunt invention by employing the teaching as taught by Kaplan to provide the user device exchanges telephony signaling and telephony communications in an analog format with an analog telephone, exchanges the telephony signaling and the telephony communications in the packet format over the packet connection, and exchanges Internet communications over the packet connection. Doing so would merely involve using known technique (faster data transmission over copper telephone lines than a conventional voice band modem can provide) to improve similar device (DSL) in the same way (DSL can be used at the same time and on the same telephone line).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHUONG A. NGO whose telephone number is 571-270-7264. The examiner can normally be reached on Monday 7:00AM to 5:30PM, Tuesday through Thursday 6:00AM to 4:30PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Abul Azad can be reached on 571-272-7599. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/CHUONG A NGO/
Examiner, Art Unit 4133

/ABUL AZAD/
Supervisory Patent Examiner, Art
Unit 4133